COMPUTER SYSTEM SECURITY VIA DYNAMIC ENCRYPTION

ABSTRACT OF THE DISCLOSURE

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A dynamic computer system security method and system using dynamic encryption and full synchronization between system nodes. A data record from a data stream created by a source user is encrypted with an initial dynamic session key. A new dynamic session key is generated based upon a previous dynamic session key and a selected previously encrypted data record. The new dynamic session key is then used to encrypt the next data record. A central authority is used to synchronize and authenticate both source and destination users with dynamic authentication keys. The central authority and users constantly regenerate new dynamic authentication keys. A child process is forked to ensure synchronization and authentication of dynamic authentication keys of each node upon a request for a secure communication establishment from a user. The central authority generates the initial dynamic session key with the current dynamic authentication key to begin a secure communication session.